

1930 Constant Avenue
Lawrence, KS 66047-3724
February 2, 2009

Rodney J. Hofer, P. E.
Professional Engineering Consultants, P. A.
1263 S. W. Topeka Blvd.
Topeka, KS 66612

Dear Mr. Hofer:

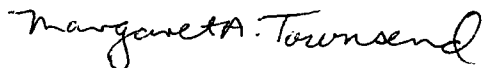
I was asked to review the City of Lindsborg plans for improvements at the wastewater treatment plant in order to permit irrigation of wastewater on the Lindsborg golf course. The construction details concerning the plant are not within the purview of the Kansas Geological Survey. However, the use of irrigation as a way to utilize and dispose of wastewater is a potential issue.

Evaluation of the soils in the area of the golf course indicate that most are well-drained but slowly permeable (Rott, D. E., 1983, Soil survey of McPherson County, Kansas: USDA NRCS). These soils may permit slow movement of potential contaminants to ground water, which is at about 20-ft depth. In addition, there may be some run-off issues involving flow to the streams in the area and the Kansas River. I would recommend that the soil infiltration be evaluated to determine if runoff or permeability issues may occur due to the irrigation process or chemistry of the water. I presume that the golf course facility is in compliance with KDHE regulations concerning use of treated wastewater for irrigation and that the needed plants and soil properties are available to deal with wastewater. My concern is the alluvial aquifer below the irrigated area and the close proximity to the Kansas River and to the stream that directly feeds into the river.

As long as the city and golf course determine that their program meets the KDHE regulations and safety precautions are present to limit irrigation during major rain storms (thus enhancing runoff) or during down times at the treatment plant (to prevent irrigation with insufficiently treated wastewater) I do not have a problem with the project moving forward. I am impressed with the city's foresight in utilizing the wastewater for irrigation thus enhancing the cleanup of the water and recycling an otherwise unused resource.

The above comments are based on regional geologic conditions and limited information available to the KGS at the time of writing and cannot be used in substitute for a detailed site characterization. Other geologic conditions, not discussed here, or for which the KGS has no knowledge, may affect the viability or safe operation of this facility or property. Geotechnical engineering and design are outside the purview of the KGS. It is the responsibility of the applicant to produce any detailed site characterizations, geotechnical or environmental testing, or design by a licensed professional geologist or engineer to complete the project.

Sincerely,



Margaret A. Townsend
Geohydrology Section



Professional Engineering Consultants, P.A.

January 16, 2009

Dr. William Harrison
Kansas Geological Survey
KU – 1930 Constant Ave.
Campus West
Lawrence, Kansas 66047

RE: Intergovernmental Review Process for KDHE/RLF
Request for Environmental Review and Clearance
Lindsborg Wastewater Treatment Plant Improvements
KDHE RLF No. C20-1790-01
PEC Project No. 08A11-001-3984

Dear Dr. Harrison:

The City of Lindsborg, Kansas is proposing to upgrade the existing Wastewater Treatment Plant (WWTP) and construct a treated water pump station and force main to provide irrigation water to the local golf course. Their intent is to request state funds through the Kansas Water Pollution Control Revolving Loan Fund program. One of the requirements of the Kansas Department of Health and Environment (KDHE) is that applicants prepare an environmental clearance document to be sent to a number of state and federal agencies. Your agency is one of those listed by KDHE.

The attached information includes a preliminary copy of the KWPCRLF application form, a narrative description of the project and a site map. Please review the information at your earliest convenience, and provide project "clearance" or comments as appropriate. We respectfully request your response by February 20, 2009. Comments should be returned to this office.

Please contact me if you have any questions regarding the project or information contained within the application package. Your prompt consideration of the review request is greatly appreciated.

Sincerely,
Professional Engineering Consultants, P.A.

Rodney J. Hofer, P.E.

RJH/pkr
Attachments

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PROJECT INFORMATION
CITY OF LINDSBORG, KANSAS
LINDSBORG WASTEWATER TREATMENT PLANT IMPROVEMENTS

1. Project Narrative Description: The City of Lindsborg, Kansas is proposing to upgrade the existing wastewater treatment plant. Proposed improvements will include wetwell reconstruction, influent pump replacement, headworks equipment replacement, anaerobic/anoxic basin construction, aeration basin modifications and equipment installation, clarifier mechanism replacement, liquid biosolids digestion/storage basin construction, maintenance building modifications, electrical and controls upgrades, treated effluent pumping and force main construction, and other miscellaneous treatment plant improvements. The new treated effluent pump station and force main is to provide irrigation water to the local golf course. Current average daily flow is about 250,000 gallons per day. The proposed design capacity of the facility is 550,000 gallons per day. The expected effluent quality is in compliance with the discharge limits of 30 mg/l BOD, 30 mg/l TSS, and the seasonally varying E. Coli limits. The receiving body is the Smoky Hill River, which is tributary to the Kansas River.
2. Site Map: A site map of the project area is attached.
3. Project Location:
 - a. Legal description: The Wastewater Treatment Plant is located in the SW ¼ of the SW ¼ of Section 16, T17S, R3W, of the 6th P.M. in McPherson County, Kansas. The force main alignment is along the west and south side of the NW ¼ of Section 21, the south side of the NE ¼ of Section 21 and the south side of the NW ¼ of Section 22, T17S, R3W.
 - b. Land Use: The present land use is the existing wastewater treatment plant site with surrounding agricultural land. The predominant vegetation at the plant site is grass. The surrounding land use is cropland.

The force main alignment is located within or adjacent to existing road right-of-way. The predominant vegetation for the alignment along 14th Avenue (US 81 Bus) is grass. The predominant vegetation along Sundance Lane is cropland. The predominant vegetation at the golf course is grass.
4. Environmental Information: The project is not known to be in close proximity to any sensitive fish or wildlife habitats. The Contractor will be required to comply with all EPA and KDHE requirements for preventing runoff pollution due to construction activities. The force main will be attached immediately below the Smoky Hill River bridge deck for the crossing of the Smoky Hill River.

The drainage area for the unnamed tributary that crosses the alignment approximately ¾ mile east of the intersection of 14th Avenue and Sundance Lane exceeds 640 acres. The 4" PVC force main would be installed more than five feet below the flowline of the creek at this location by open cut installation.

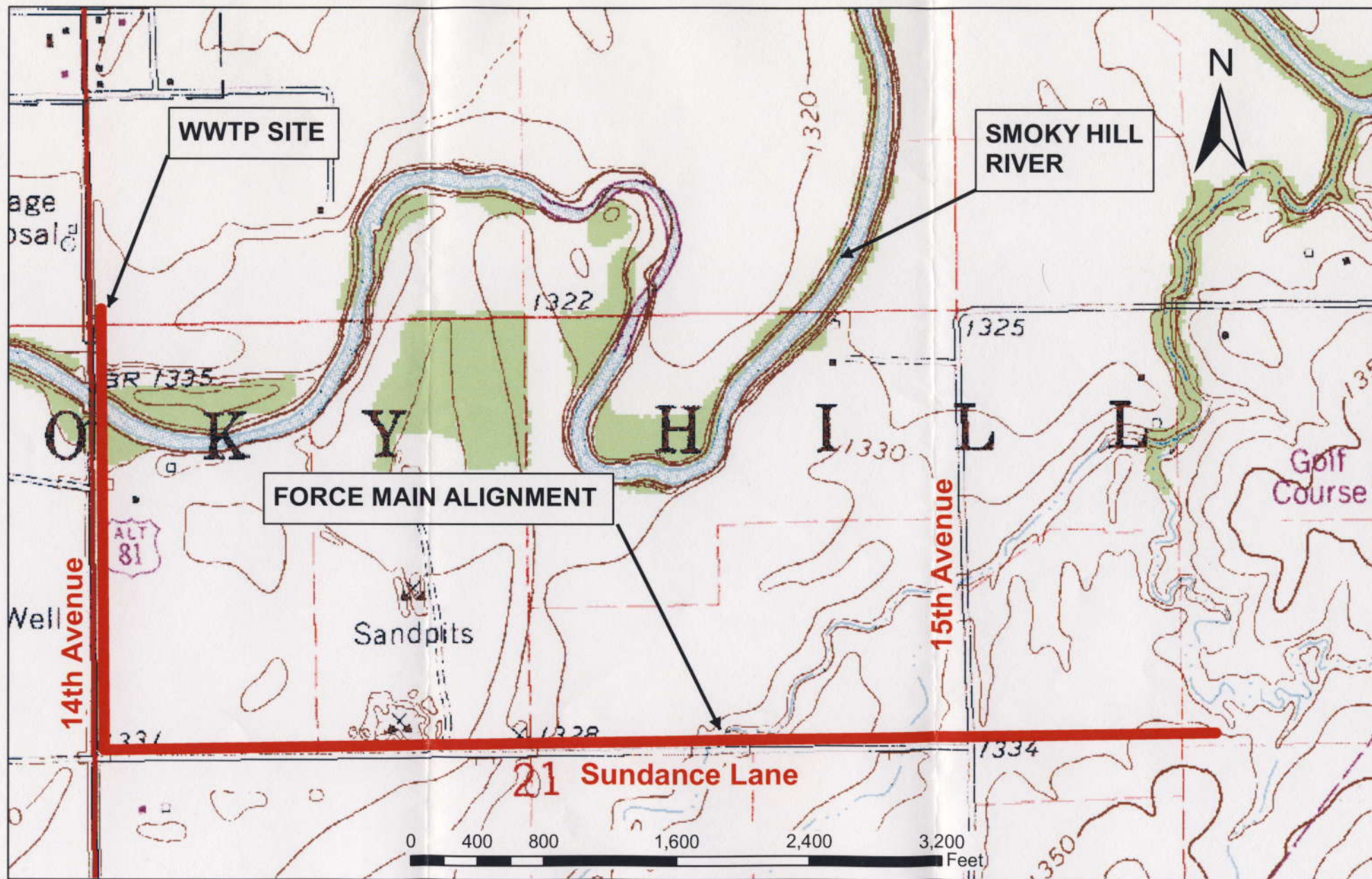
Kansas Department of Health and Environment

APPLICATION FOR SRF LOAN ASSISTANCE		New	Amendment
Project Number	C 20-1790-01	Application Type	X
1. Legal Applicant / Recipient		2. Type of Applicant / Recipient	
Applicant Name	City of Lindsborg	A. City	
Organization Unit		B. County	
Street / PO Box	101 S. Main/P.O. Box 70	C. Other (Specify)	
City	Lindsborg	Enter Appropriate Letter	A
County	McPherson		
State / Zip code	Kansas 67456		
Contact Person Name	Greg DuMars, City Administrator		
Telephone Number	785-227-3355		
3. Title of applicants project		Wastewater Treatment Plant Upgrade	
4. Type of Project		Wastewater Treatment Plant Upgrade	
5. Employer Identification Number			
6. Area of project impact (Names of cities, counties, etc)		Lindsborg, Kansas	
7a. Congressional District / Applicant		1	
7b. Congressional District / Project		1	
8. Type of change		Increase dollars	\$ -
		Decrease dollars	\$ -
9. Proposed Funding			
SRF Loan 9a.	\$ 5,400,000	10. Project Start Date	06/09/09
Applicant 9b.	\$ -	(Estimated)	
CDBG 9c.	\$ -	11. Project Duration	15
EPA 9d.	\$ -	(Months)	
EDA 9e.	\$ -	12. Date Submitted	08/10/09
Other 9f.	\$ -	(To KDHE)	
Total	\$ 5,400,000		
13. Requested Loan Repayment Period (Must not be over 20 years)		20	
14. The applicant certifies that: To the best of my knowledge and belief, data in this pre-application / application is true and correct, the document has been duly authorized by the governing body of the applicant and the applicant will comply with the attached assurances if the assistance is approved		This notice of intent / preapplication / application was made available to the state executive order 12372 process for review on: Date	
15. Certifying Representative		Signature	
Name	Judy Neuschafer		
Title	Mayor		
Mail completed application to: Kansas Department of Health and Environment Bureau of Water / Attn: Rod Geisler Municipal Programs Section, Suite 420 1000 SW Jackson Street Topeka, KS 66612-1367		If you need assistance please contact: Brenda Diegel Administrative / Finance Section, Suite 420 1000 SW Jackson Street Topeka, KS 66612-1367 785-296-4262	

LINDSBORG WWTP IMPROVEMENT LOCATION MAP

Lindsborg, KS

PEC Project No. 08A11



1 inch equals 800 feet